

R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

OBJECTIONS TO THE SPECIFICATION AND DRAWINGS

The objection to the specification and drawings has been obviated by appropriate amendment to page 9 of the specification and to FIG. 6. In FIG. 6, the capacitor array 154 has been changed to 160 as suggested.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

The rejection of claims 1-7 and 9-13 under 35 U.S.C. §102 as being anticipated by Cranford '441 is respectfully traversed and should be withdrawn.

Cranford discloses an integrated adaptive cable equalizer using a continuous-time filter (Title).

In contrast, claim 1 of the present invention provides an apparatus comprising a first circuit, a second circuit and a third circuit. The first circuit may be configured to filter an analog input signal in an analog domain in response to one or more control signals. The second circuit may be configured to convert the analog input signal to a digital signal. The third circuit may be configured to generate the control signals in response to the digital signal. The third circuit may also be configured to

control skewing of the analog input signal within the first circuit to partially compensate for frequency dependent effects associated with a transmission medium. Claims 9 and 10 provide similar limitations. Cranford is silent regarding the control of skewing of the analog input signal, as presently claimed.

In particular, Cranford is completely silent regarding any type of skew or skewing control. Applicants' representative has performed a word search of the Cranford reference on the word "skew". No references occurred. Furthermore, the assertion on page 4 of the Office Action that the wherein clause of the presently claimed invention is included in column 3, line 34 through column 5, line 15 is not accurate regarding skew or skewing. No references of the words "skew" or "skewing" appear in the cited text of Cranford. Therefore, Cranford cannot anticipate the presently claimed invention and the rejection should be withdrawn.

Furthermore, the Office Action makes the assertion that the control signal 116 in FIG. 1 of Cranford is the claimed one or more control signals. If this is the case, then one skilled in the art would expect the control signal 116 of Cranford to somehow mention skew or skewing. However, Cranford is very specific in stating that the digital signal processing circuitry 204 (part of the so-called third circuit) generates "two control parameters" (see column 4, lines 65-66 of Cranford). Cranford is also equally

as clear that "one of the parameters controls **gain** while the other controls the **frequency response** of the continuous-time filter" (emphasis added) (column 4, lines 67 through column 5, line 1). The other sections of Cranford pointed out in the Office Action are consistent with Applicants' interpretation. Specifically, Cranford deals with frequency and gain (or amplitude) characteristics of the input signal (see, for example, column 5, lines 4-6 and column 5, lines 12-13). Nowhere in Cranford is skew mentioned. As such, the presently claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

Furthermore, one skilled in the art would not typically associate gain control and/or bandwidth control with skew control. For example, the Comprehensive Dictionary of Electrical Engineering defines gain as "the ratio of the output variable of a device to its input variable" (a copy of the title page, bibliographic information, and definitions cited from the Comprehensive Dictionary are included as Exhibit A). Bandwidth is defined as "the frequency range of a message or information processing system measures in hertz." In contrast, skew is defined as "a condition where values on certain bus lines have slightly different transmission times than values on other lines of the same bus." Similarly, skewing is defined as "the offset between two signals" (in a differential amplifier). Such definitions are consistent with applicants' interpretation that gain and bandwidth are

different terms than skew. Therefore Cranford does not disclose or suggest each and every element of claims and the rejection should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claim 8 under 35 U.S.C. §103 as being unpatentable over Cranford in view of English is respectfully traversed and should be withdrawn. Claim 8 depends on claim 1, which is now believed to be allowable.

As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit
Account No. 12-2252.

Respectfully submitted,
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